











## Mitigation Work Plan

**Hydrology** – The existing wetlands are naturally fed by springs within the same surface water drainage basin as the compensatory wetland areas. These systems and the newly created wetlands will continue to be fed by springs, in addition to surface water runoff as a result of restoration of the stream channel both down gradient and up gradient of the existing fire water pond.

Earthwork – The upper 12 inches of soil from the impacted wetlands would be stripped and stock piled for replacement in the proposed mitigation areas along the restored stream. If the general contractor elects not to place the wetland soils, a specialty contractor would be subcontracted to replace the stock piled wetlands soils and initiate seedlings of species indigenous to the existing wetlands. This effort would correspond to the spring time growing season at the airport. Slightly variable topography within the proposed wetlands mitigation areas, to provide vegetation variation, will be considered in final design and preparation of construction drawings.

Planting Plan – The wetland would be planted with native herbaceous wetlands plants that currently occur within the existing wetlands (Table 4), seeded (hand-broadcast) with 17.2 pounds per acre of the native wetland seed mix (Table 5), and mulched with weed-free straw. No seeding would occur until the entire wetland area is planted. The planting would ultimately provide the dense vegetation cover necessary to provide the desired functions. All of the species would be hand-planted in groups of ten plants on 12-foot centers using 10 cubic inch plugs (or similar). The groups would include only one species per group, encompassing approximately I square yard, and would be randomly mixed.

The project site contains the following willow trees: 1) park willow (Salix monticola), 2) strapleaf willow (Salix ligulifolia), and 3) Geyer's willow (Salix geyeriana). It is recommended that the willows on site be transplanted using a track-hoe (if the schedule allows it) or planting them as cuttings (either harvested on site or from other nearby locations) on 6 foot centers.

All non-wetland areas of disturbance would be seeded with mixture of native plants that currently occur within the project area.

Table 4 Wetland Plant Plugs

Common Name	Scientific Name	Total Plugs Needed
Water Sedge	Carex aquatilis	(to be determined)
Fringed Brome	Bromus ciliatus	
Beaked Sedge	Carex rostrata	
Baltic Rush	Juneus balticus	
Diamond-leaf Willow	Salix planifolia	

Table 5 Wetland Seed Mix

Common Name	Scientific Name	Pounds Pure Live Seed per Acre
Redtop	Agrostis stolonifera	0.2
Swamp milkweed	Asclepias incarnate	1.0
Slough grass	Beckmannia syzigachne	2.0
Woolly sedge	Carex lanuginose	2.0
Nebraska sedge	Carex nebrascensis	1.0
Creeping spikerush	Eleocharis palustris	1.0
Giant manna grass	Glyceria grandis	1.0
Baltic rush	Juncus balticus	0.2
Longstyle rush	Juneus longisrylis	0.2
Torrey's rush	Juncus torreyi	0.2
Northern arrowhead	Saggitaria cuneata	1.0
Olney's rush	Scirpus americanus	2.0
Small-flowered bulrush	Scirpus microcarpus	0.2
Pale bulrush	Scirpus pallidus	0.2
Softstem bulrush	Scirpus validus	1.0
Prairie cordgrass	Spartina pectinata	1.0
Giant burreed	Sparganium eurycarpum	2.0
Blue vervain	Verbena hastate	1.0
	TOTAL	17.2

Weed Control – A qualified scientist would identify noxious weed populations in the construction area prior to construction. These populations would be chemically treated before construction and if feasible, the upper 3 feet of the soil in the infested areas would be removed and buried at least 4 feet below the finished grade in a fill area. In addition, a qualified scientist would visit the construction area a minimum of three times each growing season (early June, late July, and early September) during construction to identify noxious weed populations to be treated.

Any post-construction weed invasions would be addressed in the annual success monitoring reports and recommendations for treatment would be made. Treatments include biological, mechanical, and/or chemical controls. The San Miguel County weed coordinator would be consulted and involved in all treatment decisions.

Fencing – All portions of the project site that would not be excavated or required for construction access be fenced to avoid damage from construction equipment.

Specifications - Construction specifications would be provided to the contractor with the final construction drawings.

**Erosion Control Plan** – An Erosion Control Plan would be prepared separately for the project. The plan would indicate best management practices to protect the existing wetlands and waterways from erosion and sedimentation associated with construction practices.

Schedule – The construction of the mitigation site would between the years 2006 and 2009. The three year window for construction is dependent upon FAA issuing grants for the runway safety area improvements at the airport. It is planned that the earth work contractor selected for construction of the